

Polity/Bodies (1)

• National Anti-Doping Act, 2022 (amended 2025) comes into force

Body: Ministry of Youth Affairs & Sports

Detail: Aligns India with the World Anti-Doping Code & the UNESCO Convention; gives NADA (2009) statutory status; NDTL is the WADA-accredited lab

Exam hook: WADA (1999, Montreal) vs NADA (2009, India); doping = banned performance enhancement

Defence (4)

• NCC & Sainik Schools strengthen the youth-to-forces pipeline

Body: Ministry of Defence

Detail: NCC (National Cadet Corps) raised 1948, motto 'Unity and Discipline'; Sainik Schools (from 1961, under Sainik Schools Society) feed the NDA; Rashtriya Military Schools & Rashtriya Indian Military College (RIMC, Dehradun)

Exam hook: NCC 1948; Sainik Schools 1961; RIMC 1922

• Kargil Vijay Diwas 2026: 'Shaurya Vijay Yatra' flagged off

Body: Ministry of Defence

Detail: Kargil War (May–Jul 1999) = Operation Vijay (Army) + Operation Safed Sagar (IAF, Mirage-2000); fought along the LoC; Vijay Diwas = 26 July

Exam hook: 4 Param Vir Chakras — Batra & Manoj Pandey (posthumous), Yogendra Yadav & Sanjay Kumar (living)

• BRO Strategic Infrastructure Conclave — border roads remain indispensable

Body: Border Roads Organisation / Ministry of Defence

Detail: BRO raised 7 May 1960; builds strategic roads/bridges/tunnels; first project = Vartak (Arunachal); Himank (Ladakh); Atal Tunnel (9.02 km, Rohtang) & Sela Tunnel (Tawang)

Exam hook: roads = force multiplier for military logistics; Atal = world's longest highway tunnel above 10,000 ft

• IAF begins Exercise Pitch Black 2026 at RAAF Darwin (Rafale debut)

Body: Indian Air Force / Ministry of Defence

Detail: Pitch Black = RAAF's premier biennial multinational air-combat exercise; India joined in 2018, 2026 = first Rafale participation (+ C-17 support)

Exam hook: India-Australia — army=AUSTRAHIND, navy=AUSINDEX, air=Pitch Black; both in the Quad

Sci/Tech (8)

• NIDAR 2.0 drone-innovation challenge launched

Body: MeitY / Drone Federation India

Detail: Drone = UAV; Drone Rules 2021 liberalised operation (Digital Sky platform, green/yellow/red zones); DGCA is the regulator; flagship uses — Namo Drone Didi, SVAMITVA

Exam hook: DGCA regulates drones (not TRAI/ISRO); India aims to be a drone hub by 2030

• CeNS Bengaluru builds an ultra-sensitive room-temperature ammonia sensor

Body: CeNS (autonomous, under DST)

Detail: Ammonia = NH₃ (pungent, weak base, made by Haber process, used in fertilisers/urea); sensor uses a vanadium oxide–sulfide (VOx/VS₂) nanostructure, detects ~319 ppb

Exam hook: DST/CeNS = nano-science; nanotech = 1–100 nm; chemiresistive sensing

• Cabinet approves Semicon 2.0 (Rs 1,27,500 crore)

Body: Union Cabinet / MeitY

Detail: Builds on the India Semiconductor Mission (2021, Rs 76,000 cr); six-pillar plan; chip chain = Design -> Fab -> ATMP/OSAT; fab at Dholera (Tata-PSMC), ATMP at Sanand (Micron)

Exam hook: semiconductor = controllable material (Si), doped into p-n junctions; ISM under MeitY

• Global tender for 10 GWh giga-scale Advanced Chemistry Cell (ACC) batteries

Body: Ministry of Heavy Industries

Detail: ACC = advanced high-energy cells (lithium-ion); a cell = anode + cathode + electrolyte, converting chemical->electrical energy; PLI ACC scheme (Rs 18,100 cr, 2021)

Exam hook: Li-ion = graphite anode + metal-oxide cathode; 2019 Chemistry Nobel; capacity in GWh

• India's first hydrogen fuel-cell train (Jind–Sonipat)

Body: Ministry of Railways

Detail: PEM fuel cell: H₂ + O₂ -> water + electricity (no combustion); green hydrogen = electrolysis using renewables (vs grey from natural gas); National Green Hydrogen Mission (2023, Rs 19,744 cr)

Exam hook: fuel cell runs while fuel is supplied (unlike a battery); emits water vapour

• Indian scientists trace the Sun's meridional flow into its upper atmosphere

Body: ARIES (under DST), Nainital

Detail: Meridional flow = plasma 'conveyor belt' (equator->poles) that controls the ~11-year solar cycle & sunspots; Sun's layers core->photosphere->chromosphere->corona; space weather affects satellites/GPS/grids

Exam hook: Sun runs on fusion; Aditya-L1 (2023) studies the corona from the L1 point

• Skyroot's Vikram-1 — India's first private orbital rocket

Body: Skyroot Aerospace (Hyderabad)

Detail: Launched from Sriharikota; India = 3rd country (after US, China) with private orbital launch; earlier Vikram-S (2022, 'Prarambh') was the first private suborbital; enabled by IN-SPACe (2020) & Space Policy 2023

Exam hook: rockets work on Newton's 3rd law; orbital velocity ~7.8 km/s; named after Vikram Sarabhai

• White Rabbit network to disseminate ultra-accurate Indian Standard Time

Body: Dept of Consumer Affairs / CSIR-NPL / ISRO

Detail: IST = UTC+5:30, meridian 82°30'E through Mirzapur; CSIR-NPL keeps time with caesium atomic clocks + a hydrogen maser (UTC(NPLI)); the SI second = 9,192,631,770 caesium-133 vibrations

Exam hook: 82.5° × 4 min = 330 min = 5h30m; NavIC needs atomic clocks

Infra (1)

• PV Sindhu wins the Japan Open 2026 (first Indian to do so)

Body: —

Detail: Sindhu (Hyderabad, coached by Pullela Gopichand): Olympic silver (Rio 2016) & bronze (Tokyo 2020) — first Indian woman with two individual Olympic medals; BWF World Champion 2019 (Basel)

Exam hook: BWF (HQ Kuala Lumpur); Thomas Cup (men)/Uber Cup (women); India won Thomas Cup 2022